




MECHANICAL SYSTEMS DATA SHEET: VESSEL

PLANT ITEM No.

24590-PTF-ME-CNP-EVAP-00001

Project	RPP-WTP	P&ID	24590-PTF-M6-CNP-P0008	 R10377790
Project No	24590	Process Data Sheet	24590-PTF-M5D-CNP-00001	
Project Site	Hanford	Vessel Drawing		
Description	Cesium Evaporator Separator Vessel CNP-EVAP-00001			

Reference Data

ISSUED BY
RPP-WTP PDC

Charge Vessels (Tag Numbers)	None
Pulsejet Mixers / Agitators (Tag Numbers)	None
RFDs/Pumps (Tag Numbers)	None

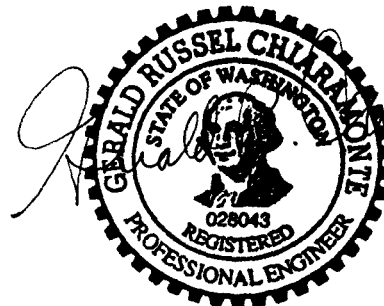
Design Data

Quality Level	QL-1	Fabrication Specs	24590-WTP-3PS-MV00-TP001		
Seismic Category	SC-I	Design Code	ASME VIII Div 1		
Service/Contents	Radioactive Liquid	Code Stamp	Yes		
Design Specific Gravity	1.37*	NB Registration	Yes		
Maximum Operating Volume	gal	*	Weights (lbs)	Empty	Operating
Total Volume	gal	*	Estimated *		Test
			Actual *		

Inside Diameter	inch	*	Wind Design	Not Required	
Length/Height (TL-TL)	inch	*	Snow Design	Not Required	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design
					24590-WTP-3PS-SS90-T0001 & 24590-WTP-3PS-MV00-TP002
Internal Pressure	psig	-13.4*	50*	N/A	Seismic Base Moment *
External Pressure	psig	0*	15*	N/A	Postweld Heat Treat
Temperature	°F	122/140*	40/250*	N/A	Corrosion Allowance
Min. Design Metal Temp	°F	40*			Hydrostatic Test Pressure *

Contents of this document are Dangerous Waste Permit Affecting.

Please note that source, special nuclear and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA), are regulated at the U.S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority. DOE asserts, that pursuant to the AEA, it has sole and exclusive responsibility and authority to regulate source, special nuclear, and byproduct materials at DOE-owned nuclear facilities. Information contained herein on radionuclides is provided for process description purposes only.



EXPIRES: 11/9/ 2004

This bound document contains a total of 2 sheets

0	9/14/04	Issued for Permitting Use		K.R. Sadler Jr.		
REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	REVIEWER	APPROVER



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Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	SB575 (Hastelloy) UNS N06022**	•	Auxiliary
Shell	SB575 (Hastelloy) UNS N06022**	*	Primary
Bottom Head	SB575 (Hastelloy) UNS N06022**	•	Primary
Support	SA240 304 (Note 3)**	*	NIA
Jacket/Coils/Half-Pipe Jacket	NIA	NIA	NIA
Internals	SB575 (Hastelloy) UNS N06022**	*	Instrument Piping Primary
Pipe	SB622 (Hastelloy) UNS N06022 (Seamless)**	•	See Note 4
Forgings/ Bar stock (internal)	SB564 (Hastelloy) UNS N06022**	*	As Note 4 for Nozzle Necks
Gaskets	*	•	Auxiliary
Bolting	SA194 8MI SA193 B8M	•	Auxiliary

Miscellaneous Data

Orientation	Vertical	Support Type	*
Insulation Function	NIA	Insulation Material	NIA
Insulation Thickness (inch)	NIA	Internal Finish	* (Note 1)
		External Finish	*

Remarks

• To be determined by Seller.

** To be verified by seller

Note 1: Weld surface finish shall be de-scaled as laid.**Note 2: Design life is 40 years.****Note 3: Maximum carbon content of 0.030% for all welded components****Note 4: Nozzle necks below maximum liquid level are primary, others auxiliary.**